REMARKS

The Examiner has rejected claims 1-6 under 35 U.S.C. 112, second paragraph as being indefinite, and has specifically pointed out to the Applicant that "said audio digital-to-analog converter" in line 16 of claim 1 has insufficient antecedent basis.

Claim 1 has been amended to recite the following elements: "an audio digital-to-analog converter", and "a radio digital-to-analog converter". Applicant submits that amended claim 1 complies with the requirement of 35 U.S.C. 112, first paragraph, and requests that the Examiner withdraw the rejection thereto, and also the rejections to claims 2-6 which depend therefrom.

The Examiner has rejected claims 1, 5, 6, 7, 11, 12, 13, 17, 18, 19, 20, and 21 under 35 U.S.C. 103(a) as being unpatentable over Lubin *et al.* (U.S. Patent No. 6,434,395 B1) in view of Jennings *et al.* (U.S. Patnt No. 6,430,174 B1).

Lubin teaches a radio telephone handset which includes the capability of operating as a data transfer terminal as well as an analog cellular subscriber station. The handset of Lubin is taught as having two distinct modes of operation, namely, an analog cellular communication mode, and a Cellular Digital Packet Data (CDPD) mode. These two modes are described as separate and distinct at numerous passages: "The aforementioned objects are carried out by a portable radio telephone handset of the present invention, including means for communicating in an analog cellular mode, means for communicating in a Cellular Digital Packet Data (CDPD) mode *and means for selecting between the two modes"* (column 4 lines 13-18); "*discriminating between* information in the paging signal *pertaining to CDPD* transmission and information *pertaining to analog cellular mode* transmission" (column 4 lines 24-27); "a radio frequency transceiver *switchably* operable in *either* an *analog cellular mode or a Cellular Data Pack[sic] Data (CDPD) mode* and processor means for controlling operation in both the analog cellular mode and the CDPD mode" (column 4 lines 29-35).

In Lubin these two modes of communication carry different types of information which follow different pathways through the handset. The capability of a single handset to deal with these distinct modes is the integration Lubin is directed toward: "Heretofore, providing efficient wireless transmission of *both* voice and data signals into one small hand held integrated package has been difficult" (column 3 lines 42-44).

Instructive is the nature of data signals traversing the CDPD data pathway: "the handset of the present invention has the capability of sending *data messages* such as electronic mail input by the handset key pad to other users in the CDPD network. The handset can also be used to transport *data (via electronic mail/page/FAX/file) to and from a host computer* via an appropriate *I/O port* and the CDPD network".

With respect to the AMPS analog cellular mode, it is used for two distinct modes of communication, analog voice communication mode, and digital data mode: "If a paging signal indicating an incoming AMPS communication is received, the CDPD mode is interrupted (even if CDPD communication is being conducted at that moment), and *one* of *the two AMPS modes (voice 210 and data 214)* is activated. The user or a program from the host computer can select *whether an AMPS voice* call will *preempt AMPS data communication*" (column 8 line 64 – column 9 line 3); "The AMPS mode will also support other communication techniques such as *circuit switched cellular communication* to effect a *cellular modem*. Using this technique, the handset of the present invention supports transmission of data and facsimile over the AMPS voice channel using modulation, facsimile, control and data compression standards as listed on page 6 of Appendix V" column 9 lines 40 – 47).

Clearly analog voice information (audio information) is taught as separate and distinct from data Circuit Switched Cellular Data (CSCD) cellular modem communication and the pathways of the data are hence also different: "*Modem communication* over an AMPS channel is also controlled by chip 303. *Voice communication* is effected using speaker 334 and microphone 335 connected to audio codec 336, which in turn is connected to processor chip 303

to receive the *appropriate signals for audio communication*. Audio codec 336 is activated by switch 337 when appropriate signals are received from processor chip 303."

In the receive direction, Lubin does not teach that any of the CDPD *packet data* is sent to the *audio* codec 336. As *audio* codec 336 is connected via an *analog* front end to processor 303, Lubin in fact teaches away from sending any of the *data that was packetized* to the *audio* codec 336 to be transmitted over the speaker 334. Moreover, Lubin does not teach that any of the signals of the second AMPS mode, namely *data* sent via the *data mode* are sent to the *audio* codec 336 to be transmitted over the speaker 334. Similarly, in the transmit direction, Lubin does not teach that any of the analog voice signals input at the microphone 335 are converted into *data* for transmission in AMPS *data mode*, or into *packets* for transmission as CDPD *packet data*, or that there is a transmit path for said analog voice information to be encoded in such a manner.

Lubin does not teach that anything other than received AMPS analog voice signals are sent to the audio codec 336, and the speaker 334, or anything other than transmitted AMPS analog voice signals originating from the audio codec 336 and the microphone 335.

By contrast, claim 1 provides that in the receive direction "the transceiver receives radio signals from said antenna and converts them into analog baseband signals, the radio analog-to-digital converter converts said analog baseband signals into raw data signals, the digital cellular processor/microcontroller processes said raw data signals into a voice over Internet Protocol packetized data stream, the Internet protocol processor/microcontroller unpacketizes and processes said voice over Internet Protocol packetized data stream into a voice data stream, the audio digital-to-analog converter converts said voice data stream into analog waveforms, and the speaker broadcasts said analog waveforms" and in the transmit direction provides that "the microphone receives analog waveforms, the audio analog-to-digital converter converts said analog waveforms into raw data signals, the Internet protocol processor/microcontroller packetizes and processes said raw data signals into a voice over Internet Protocol packetized data stream, the digital cellular processor/microcontroller processes said voice over Internet Protocol

Applicant respectfully submits that independent claim 1, is patentable over Lubin in view of Jennings and respectfully requests that the Examiner withdraw the 35 U.S.C. 103(a) rejection thereto.

The Examiner has rejected claims 2-4, 8-10, 14-16 as being unpatentable over Lubin in view of Jennings and further in view of Grob *et al.* (U.S. Patent No. 5,574,773).

Grob teaches the playing of an audible tone to a user to enable the user to monitor success or failure of a data connection over a digital wireless connection.

Applicant submits that Grob does not teach the elements of the wireless handset of independent claim 1 nor does it teach the receive and/or transmit pathways for a voice data stream through the various elements of the handset as recited in independent claim 1 of the present application. For at least the reasons that claim 1 is patentable over Lubin in view of Jennings, Applicant submits that claims 2-4 which depend therefrom are patentable over Lubin in view of Jennings further in view of Grob, and respectfully requests the Examiner withdraw the 35 U.S.C. 103(a) rejections thereto.

With respect to claims 5 and 6 which depend from claim 1, Applicant submits that for at least the reason that claim 1 is patentable over Lubin in view of Jennings, these claims are also patentable over Lubin in view of Jennings, and respectfully requests the Examiner withdraw the 35 U.S.C. 103(a) rejections thereto.

With respect to claim 7, for at least the same reasons given in respect of claim 1, Applicant submits that neither Lubin or Jennings specifies all of the elements of the wireless handset of independent claim 7 nor do they teach the receive and/or transmit pathways for a voice data stream through the various elements of the handset as recited in independent claim 7 of the present application. Applicant further submits that since neither reference teaches the receive and transmit pathway for packetized voice signals, the combination of Lubin and Jennings does not render independent claim 7 obvious.

Applicant respectfully submits that independent claim 7, is patentable over Lubin in view of Jennings and respectfully requests that the Examiner withdraw the 35 U.S.C. 103(a) rejection thereto.

Applicant submits that Grob does not teach the elements of the wireless handset of independent claim 7 nor does it teach the receive and/or transmit pathways for a voice data stream through the various elements of the handset as recited in independent claim 7 of the present application. For at least the reasons that claim 7 is patentable over Lubin in view of Jennings, Applicant submits that claims 8-10 which depend therefrom are patentable over Lubin in view of Jennings further in view of Grob, and respectfully requests the Examiner withdraw the 35 U.S.C. 103(a) rejections thereto.

With respect to claims 11 and 12 which depend from claim 7, Applicant submits that for at least the same reasons given in respect of claim 7, these claims are also patentable over Lubin in view of Jennings, and respectfully requests the Examiner withdraw the 35 U.S.C. 103(a) rejections thereto.

With respect to claim 13, for at least the same reasons given in respect of claim 1, Applicant submits that neither Lubin or Jennings specifies all of the elements of the wireless handset of independent claim 13 nor do they teach the receive and/or transmit pathways for a voice data stream through the various elements of the handset as recited in independent claim 13 of the present application. Applicant further submits that since neither reference teaches the receive and transmit pathway for packetized voice signals, the combination of Lubin and Jennings does not render independent claim 13 obvious.

Applicant respectfully submits that independent claim 13, is patentable over Lubin in view of Jennings and respectfully requests that the Examiner withdraw the 35 U.S.C. 103(a) rejection thereto.

Applicant submits that Grob does not teach the elements of the wireless handset of independent claim 13 nor does it teach the receive and/or transmit pathways for a voice data

stream through the various elements of the handset as recited in independent claim 13 of the present application. For at least the reasons that claim 13 is patentable over Lubin in view of Jennings, Applicant submits that claims 14-16 which depend therefrom are patentable over Lubin in view of Jennings further in view of Grob, and respectfully requests the Examiner withdraw the 35 U.S.C. 103(a) rejections thereto.

With respect to claims 17 and 18 which depend from claim 13, Applicant submits that for at least the same reasons given in respect of claim 13 above, these claims are also patentable over Lubin in view of Jennings, and respectfully requests the Examiner withdraw the 35 U.S.C. 103(a) rejections thereto.

With respect to claim 19, for at least the same reasons given in respect of claim 1 above, Applicant submits that neither Lubin or Jennings teach the receive and/or transmit pathways for a voice data stream as in the various method steps as recited in the method of independent claims 19, and 21 of the present application. Applicant further submits that since neither reference teaches the receive and transmit pathway for packetized voice signals, the combination of Lubin and Jennings does not render independent claims 19, and 21 obvious.

Applicant respectfully submits that independent claims 19 and 21 are patentable over Lubin in view of Jennings and respectfully requests that the Examiner withdraw the 35 U.S.C. 103(a) rejections thereto.

With respect to claim 20 which depends from claim 19, Applicant submits that for at least the same reasons given in respect of claims 19 and 21 above, these claims are also patentable over Lubin in view of Jennings, and respectfully requests the Examiner withdraw the 35 U.S.C. 103(a) rejection thereto.

The Examiner has rejected claims 22 – 28 as being anticipated by Andersson (U.S. Patent No. 6,047,194) under 35 U.S.C. 102(e).

Independent claim 22 of the present application recites method steps including "generating an SMS message with the Internet protocol (IP) address of the first Internet Protocol enabled device embedded therein" and "extracting the IP address from said SMS message". Independent claim 27 of the present application recites method steps including "receiving an SMS message with an Internet Protocol (IP) address embedded therein" and "extracting the IP address from said SMS message".

Andersson teaches an SMS message which "provides the mobile terminal with the *identity* of the originator of the packet data" (column 1, lines 25 – 27). It also teaches that "An SMS message *identifying* the origination source, i.e., the *identity* of the Internet host 12, is first generated by the SMS-C 56 and caused to be transmitted over a control channel, in conventional fashion, to the wireless station 14" (column 6 lines 4 – 8) and "When the SMS message *indicating the originator* of the packet data is received at the receiver circuitry 142, such *identification* is displayed upon the display element 144. A user of the mobile terminal determines, responsive to the displayed information, whether to permit transmission of the packet data to the mobile terminal 14." (column 8, lines 33 – 38).

Andersson simply does not teach an SMS message embedded with an *IP address* or the extraction of an *IP address* from an SMS message, both of which are specific features recited in independent claims 22 and 27. Applicant submits for at least the reason that Andersson does not disclose all of the features of claims 22 and 27, Andersson does not anticipate claims 22 and 27. Applicant therefor respectfully requests that the Examiner withdraw the rejections to claims 22 and 27 under 35 U.S.C. 102(e). Furthermore, since claims 23-26 depend from claim 22, and since claim 28 depends from claim 27, for at least the same reasons given in respect of claims 22 and 27, Applicant requests that the Examiner withdraw the rejections to claims 23-26 and 28 under 35 U.S.C. 102(e).

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached pages are captioned "Version with markings to show changes made".

The applicant believes the Examiner's objections have been met by amendment of the specification and of the claims, and respectfully requests that a timely Notice of Allowance be issued in this case

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

Claim 1 has been amended as follows:

1. (Amended) A digital cellular handset comprising:

an antenna;

a radio transceiver connected to said antenna;

a radio analog-to-digital converter and a radio digital-to-analog converter connected to said transceiver;

a digital cellular processor/microcontroller connected to said radio analog-to-digital and digital-to-analog converters;

an Internet protocol processor/microcontroller connected to said digital cellular processor/microcontroller;

an audio analog-to-digital converter and [a] an audio digital-to-analog converter connected to said Internet protocol processor/microcontroller; and

a speaker connected to said audio digital-to-analog converter and a microphone connected to said audio analog-to-digital converter; wherein,

in the receive direction the transceiver receives radio signals from said antenna and converts them into analog baseband signals, the radio analog-to-digital converter converts said analog baseband signals into raw data signals, the digital cellular processor/microcontroller processes said raw data signals into a voice over Internet Protocol packetized data stream, the Internet protocol processor/microcontroller unpacketizes and processes said voice over Internet Protocol packetized data stream into voice data stream, the audio digital-to-analog converter

converts said voice data stream into analog waveforms, and the speaker broadcasts said analog waveforms, and,

in the transmit direction the microphone receives analog waveforms, the audio analog-to-digital converter converts said analog waveforms into raw data signals, the Internet protocol processor/microcontroller packetizes and processes said raw data signals into a voice over Internet Protocol packetized data stream, the digital cellular processor/microcontroller processes said voice over Internet Protocol packetized data stream into a digital cellular compatible data stream, the radio digital-to-analog converter converts said digital cellular compatible data stream into analog signals, and the transceiver converts the analog signals into a modulated radio carrier signal which is forwarded to said antenna.